

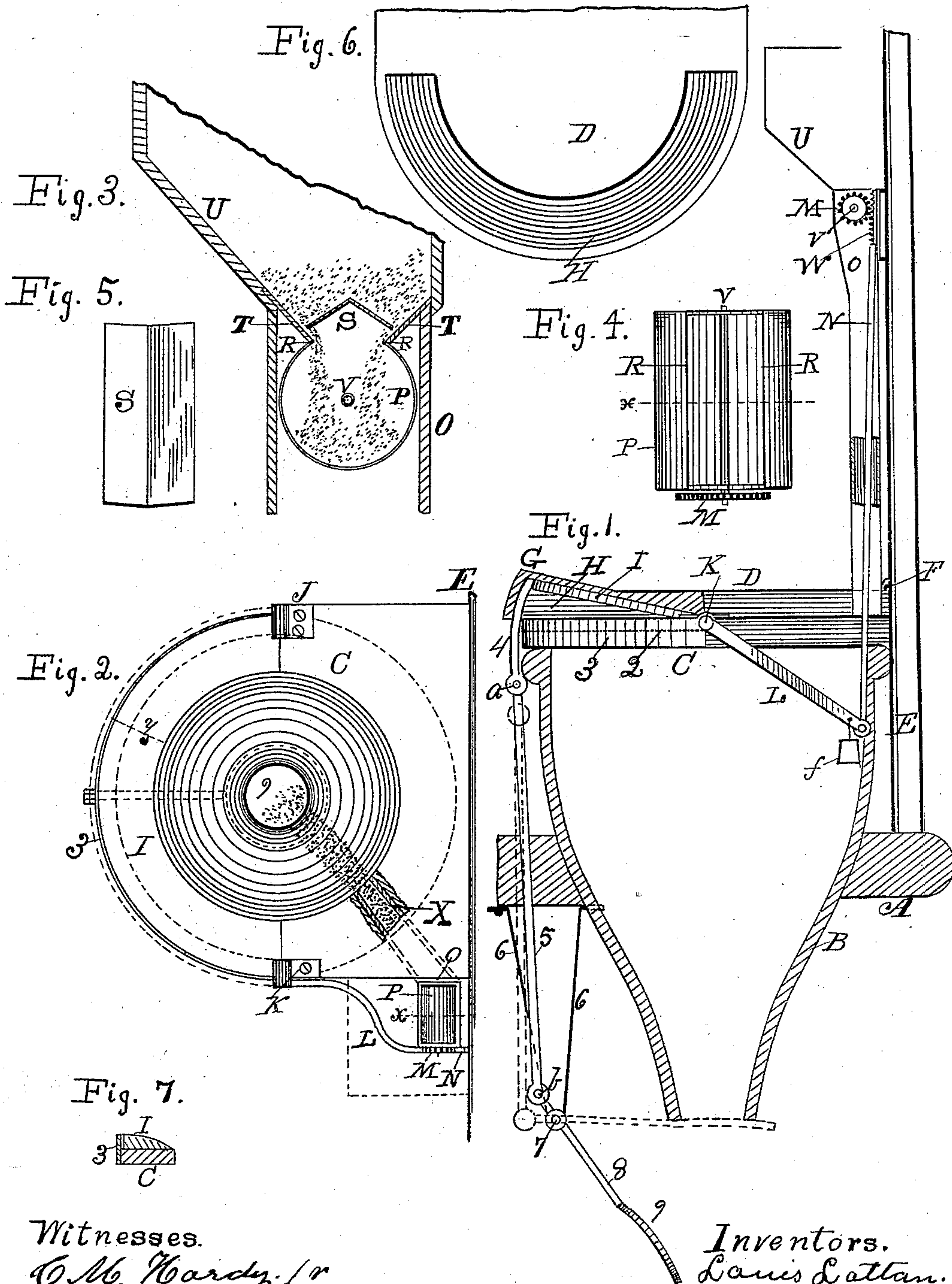
(No Model.)

L. LATTAN & H. TRIPP.

WATER CLOSET FOR CARS.

No. 398,516.

Patented Feb. 26, 1889.



Witnesses.

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UNITED STATES PATENT OFFICE.

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WATER-CLOSET FOR CARS.

SPECIFICATION forming part of Letters Patent No. 398,516, dated February 26, 1889.

Application filed December 26, 1888. Serial No. 294,674. (No model.)

To all whom it may concern:

Be it known that we, LOUIS LATTAN and HERMAN TRIPP, citizens of the United States, and residents of Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Water-Closets for Cars, of which the following is a specification, reference being had to the accompanying drawings illustrating the invention, in which—

Figure 1 is a vertical central section of the closet-bowl and a sectional side elevation of the mechanism for closing the lower end of the bowl when the seat to the closet is occupied, and a portion of the mechanism for putting sand into the bottom of the bowl, also when the seat is occupied. Fig. 2 is a top or plan view of the closet with the top hinged lid removed, and also the sand-receptacle removed, more clearly to show the construction, the bucket being in position to discharge sand. Fig. 3 is a vertical section on line *z*, Fig. 2, enlarged three diameters, with the bucket in position to be filled with sand from a receptacle above; Fig. 4, an enlarged top view of the bucket removed, corresponding to Fig. 3; Fig. 5, a top view of the bottom of the sand-receptacles, removed; Fig. 6, a broken underside view of the hinged lid to the closet; Fig. 7, a section of Fig. 2 on line *z*.

The object of this invention is to close the lower ends of the bowls of water-closets for cars automatically by a person sitting on the seat. It is assumed that to prevent an upward current of cold air in the bowl of a water-closet in cold weather when the seat is occupied is of material advantage. We accomplish this as follows:

A represents a portion of the floor of a passenger-car, and E one of the exterior walls thereof.

B is a vertical central section of the closet-bowl now employed on such cars. In some cars this bowl has a single lid, which is elevated for the occupant to sit on the rim of the bowl, and in others the bowl is provided with a wooden seat, and the seat is covered with a hinge-lid. We also provide the bowl with a wooden seat and a hinged lid, but construct the same as follows, to adapt them to the mechanism employed:

The front top half of the seat C, which is a segment of half a circle, is rabbeted down, as indicated by dotted line 2, Fig. 1, to receive the semicircular portion I of a lever, I L, which is pivoted to the main portion of the seat at J K. The lid D is constructed with a thick front portion, G, that a segmental recess H may be formed in the under side thereof to permit said part I to oscillate between the top of said recess and the bottom of the rabbet in the said seat.

In order to strengthen the rabbeted portion of the seat, we place around it a metal plate, 3, securing the same by screws, so that the top of the plate shall come level with the main portion of the seat. Attached to the front portion of the part I is a rod, 4, which is jointed to a rod, 5, at *a*, and the latter rod is jointed to a lever, 8, at *b*. The lever 8 terminates in a valve, 9, which closes the lower end of the bowl B, and it is pivoted to a bracket, 6 6, at 7, to have a firm support. The pivot K terminates in the part L, which, with the part I forms the lever, which is jointed to and operates a rod, N. On the upper end of this rod is formed a rack, W, which meshes into and drives a pinion, M, which is on a shaft, V, of the bucket P. This bucket is open on its periphery between the points R R, and it is hung in a pipe, O, below the sand-receptacle U, the lower end of which connects with a pipe, X, Fig. 2, leading into the bowl B. The bottom of the sand-receptacle has inclined sides T T and a gable-shaped bottom, S, so that it keeps too much pressure of sand off of the bucket P, and sand in sufficient quantity will pass between the gable S and inclined sides to keep the bucket supplied. The lid D is hinged to the car on some suitable support at F, and when it is thrown back and a person sits on the broad segmental part I of the lever I L the part I will be brought down to dotted lines 2, Fig. 1, the valve 9 will close the lower end of the bowl B, the rod N will be elevated by the part L, and the rack W will turn the pinion M half-round, and consequently turn the bucket P top side down to discharge the sand therein onto the valve 9. The purpose of the sand, which must be dry, is to prevent the valve from becoming coated by deposits. So soon as the weight of a per-

son is removed from the segment part I, a weight, *f*, will bring back the mechanism, as shown at Fig. 1. Calculations made from observation show that where a car has but one closet the sand required is about a half-bushel to two hundred and fifty miles run, the bucket to hold one pint of sand.

For warm weather the valve 9 may be disconnected and the lever L wired to bring the part I permanently onto the rabbet in the seat C. In different cars the position of the mechanism can be readily modified to suit the place the closet occupies.

It is preferable that all the mechanism added by us to the closet be made of metal, and be finished to correspond with the car on which they are placed.

We claim and desire to secure by Letters Patent of the United States—

20 1. An improvement in water-closets, consisting of the lever I L, which is pivoted to the rabbeted seat C, and the segment part I provided with the rod 4 at its middle portion, in combination with the connecting-rod 5, lever

8, valve 9, bowl B, and a lid, D, provided with a segmental recess, as and for the purpose specified.

2. The seat C, provided with a segmental rabbet in its top front portion, and a lever composed of the segmental part I and the back extending part, L, and the lever pivoted to said seat C, and the segmental part I provided with the rod 4 and lying over said rabbet, in combination with the rod 5, lever 8, and valve 9, the lid D, provided with the segmental recess H, the rod N, jointed to lever L and provided with the rack W, the sand-receptacle U, and the pipes O X, and bowl B, the bucket P, located in the top portion of pipe O, and provided with the shaft V and gear M, and the sand-receptacle U, as specified and shown.

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Witnesses:

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